Erratum: Numerical simulation of mesoscopic systems with open boundaries using the multidimensional time-dependent Schrödinger equation [J. Appl. Phys. 69, 7153 (1991)]

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The article contains a few notational and typographical errors that should be corrected as follows: In Sec. II A, the continuum effective mass Hamiltonian should be $H = -(\hbar^2/2m^*)\nabla^2 + V(r)$. In Sec. II B, Eq. (7) should read

$$\psi_{\text{left}}(x) \simeq ae^{ikx} + (b_l + c_l x)e^{-ikx}$$
$$\psi_{\text{right}}(x) \simeq (b_r + c_r x)e^{ik'x}. \tag{7}$$

Again, in Sec. II B, the last paragraph should begin:

For the example calculations presented in the next section, we chose the following simple scheme, in the form of Eq. (8):

$$\langle \mathbf{R}_b + \hat{\mu}\Delta | \psi(t) \rangle \simeq \left[\prod_{l=0}^{L} \langle \mathbf{R}_b - \hat{\mu} l\Delta | \psi(t_n) \rangle^{a_l} \right] \left[\sum_{l=0}^{L} a_l \frac{\langle \mathbf{R}_b - \hat{\mu} l\Delta | \psi(t) \rangle}{\langle \mathbf{R}_b - \hat{\mu} l\Delta | \psi(t_n) \rangle} \right], \tag{10}$$

where $\mathbf{R}_b$ is a boundary site and $\hat{\mu}$ is a unit vector normal to the boundary and directed outwards, as shown in Fig. 1. An appropriate choice of the coefficients a_l provides any desired polynomial curve fit near the boundary. For example, for a linear curve fit, $a_0 = 2$, $a_1 = -1$, $a_{l>2} = 0$ and for a parabolic curve fit, $a_0 = 3$, $a_1 = -3$, $a_l = -3$, $a_2 = 1$, $a_{l>3} = 0$.

Finally, in Sec. III B, contrary to the text but in agreement with the caption of Fig. 3, the stub length was switched from 70 to 110 Å.

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